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| APPLICATION NO.                                    | F                    | ILING DATE | FIRST NAMED INVENTOR |     | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|----------------------|------------|----------------------|-----|---------------------|------------------|
| 09/823,001   | 9/823,001 03/30/2001 |            | Michael Sijacic      |     | 13220.002001; P5653 | 6688             |
| 32615  | 7590                 | 12/09/2005 |                      |     | EXAMINER            |                  |
| OSHA LIANG L.L.P./SUN<br>1221 MCKINNEY, SUITE 2800 |                      |            |                      |     | SAIN, GAUTAM        |                  |
| HOUSTON, TX 77010                                  |                      |            |                      |     | ART UNIT            | PAPER NUMBER     |
|  |                      |            | •                    | . ' | 2176                |                  |

DATE MAILED: 12/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.   | Applicant(s)  |  |  |  |  |  |  |
|--|---|---|--|--|--|--|--|--|
| Office Action Comment  | 09/823,001  | SIJACIC ET AL.  |  |  |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit  |  |  |  |  |  |  |
|  | Gautam Sain   | 2176  |  |  |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c  | orrespondence address   |  |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period versilled to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE | N.<br>nely filed<br>the mailing date of this communication.<br>D (35 U.S.C. § 133). |  |  |  |  |  |  |
| Status   |   |   |  |  |  |  |  |  |
| 1)⊠ Responsive to communication(s) filed on 23 Ju  | ine 2005  |   |  |  |  |  |  |  |
| · -  | · · · · · · · · · · · · · · · · · · ·   |   |  |  |  |  |  |  |
| Since this application is in condition for allowance except for formal matters, prosecution as to the me   |   |   |  |  |  |  |  |  |
| <i>,</i>   | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   |   |  |  |  |  |  |  |
| Disposition of Claims  |   |   |  |  |  |  |  |  |
| 4)⊠ Claim(s) <u>1,4-8 and 10-21</u> is/are pending in the application.   |   |   |  |  |  |  |  |  |
|  | 4a) Of the above claim(s) is/are withdrawn from consideration.  |   |  |  |  |  |  |  |
| 5) Claim(s) is/are allowed.  |   |   |  |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1,4-8 and 10-21</u> is/are rejected.   |   |   |  |  |  |  |  |  |
|  | •   |   |  |  |  |  |  |  |
|  |   |   |  |  |  |  |  |  |
| Application Papers   |   |   |  |  |  |  |  |  |
| 9) The specification is objected to by the Examine   | r   |   |  |  |  |  |  |  |
| 9)  The specification is objected to by the Examiner.  10)  The drawing(s) filed on is/are: a)  accepted or b)  objected to by the Examiner.   |   |   |  |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |   |  |  |  |  |  |  |
| Replacement drawing sheet(s) including the correct   |   |   |  |  |  |  |  |  |
| 11) ☐ The oath or declaration is objected to by the Ex   |   | • •   |  |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |   |  |  |  |  |  |  |
| 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  |   |   |  |  |  |  |  |  |
|  | 1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No               |   |  |  |  |  |  |  |
|  |   |   |  |  |  |  |  |  |
| 3. Copies of the certified copies of the prior   | • •   |   |  |  |  |  |  |  |
|  | application from the International Bureau (PCT Rule 17.2(a)).   |   |  |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |   |  |  |  |  |  |  |
|  | •   |   |  |  |  |  |  |  |
| Attachmont/c)  |   |   |  |  |  |  |  |  |
| Attachment(s)  1) X Notice of References Cited (PTO-892)   | 4) 🔲 Interview Summary  | (PTO-413)   |  |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Da   | te  |  |  |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   | 5) Notice of Informal P<br>6) Other:  | atent Application (PTO-152)   |  |  |  |  |  |  |
| Paper No(s)/Mail Date  | 3) 🗀 Oliter   |   |  |  |  |  |  |  |

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#### **DETAILED ACTION**

1) This is a NonFinal rejection in response to Amendments/Remarks filed on 6/23/05 (via RCE).

2) Claims 1,4-8,10-21 are pending. Applicant cancelled claims 2, 3, and 9.

### Continued Examination Under 37 CFR 1.114

3) A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/23/05 has been entered.

## Claim Rejections - 35 USC § 103

- 4) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4-1) Claims 1, 8, 11, 12, 15, 16, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Van Huben</u> et al (as cited above), in view of <u>Maki</u> et al (US 5201047, issued Apr 6, 1993), further in view of NonPatent Literature "A Distributed Scientific Data Archive Using the Web, XML and SQL/MED" by Mark Papiani (hereinafter "<u>Papiani</u>")(published date Sept 1999, ACM Press, pages 56-62).

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Regarding claim 1, Van Huben teaches "defining a model ... field" (ie., provide a data management model structure as part of library ...)(col 7, lines 20-40; col 13, lines 59).

Van Huben teaches "packaging ... file" (ie., archiving and backing up data in the library)(col 28, lines 40-63);

Van Huben teaches "wherein the process management system executes on the computer system" (ie., running on a computer in a client/server environment)(col 11, lines 20-25).

Van Huben teaches "adding the archive file into the process management system as a new class (ie., archiving and backing up is done with the Design Control Repository onto tape or another repository. With the broadest reasonable interpretation of the claim language of 'archive', it is the examiner's position that the first item in the repository will be the new class)(col 28, lines 41-62).

Van Huben does not expressly teach, but Maki teaches "creating a file ... custom data field" (ie., create a unique file comprising the item classification)(col 3, lines 10-20)(unique attributes for a specific class of entity)(col 1, lines 8-10).

Van Huben does not expressly teach, but Maki teaches "inserting the custom data field" (ie., classification tree nodes with new attributes for other business entities constructed)(col 4, lines 23-53).

Van Huben, in view of Maki does not expressly teach the amendments to the claims, but the Papiani article does suggest the amendments (ie., Papiani teaches a distributed scientific data archive using web, xml and SQL/MED for fast storage,

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searching and retrieval of large files using the web and object oriented technology such as Java Database Connectivity)(see Abstract, page 56; page 58, sec 2.1)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Van Huben to include creating a unique file comprising unique attributes for a specific class of entity and to include classification tree nodes with the new attributes for other business entities newly constructed as taught by Maki, providing the benefit of a method of defining unique, user determined attributes in a data management system for file and database management for a design control system (Van Huben, col 5, lines 5-15; col 6, lines 55-60), further to include a distributed database system for archiving using object oriented technology as taught by Papiani, providing the benefit of fast storage (see Papiani, Abstract section).

**Regarding claim 8, 12**, Van Huben teaches "model ... data field" (ie., snapshot of a library ... image of the library)(col 12, lines 25-30).

Regarding claim 11, Van Huben teaches "a model" (ie., provide a data management model structure as part of library ...)(col 7, lines 20-40; col 13, lines 59).

Van Huben teaches "an archive file created by packaging ... file" (ie., archiving and backing up data in the library)(col 28, lines 40-63).

Van Huben teaches "wherein the process management system executes on the computer system" (ie., running on a computer in a client/server environment)(col 11, lines 20-25).

Van Huben teaches adding the archive file (ie., archiving and backing up is done with the Design Control Repository onto tape or another repository. With the broadest

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reasonable interpretation of the claim language of 'archive', it is the examiner's position that the first item in the repository will be the new class)(col 28, lines 41-62).

Van Huben does not expressly teach, but Maki teaches "file ... properties" (ie., create a unique file comprising the item classification)(col 3, lines 10-20)(unique attributes for a specific class of entity)(col 1, lines 8-10).

Van Huben does not expressly teach, but Maki teaches "a new class created by inserting the custom data field" (ie., classification tree nodes with new attributes for other business entities constructed)(col 4, lines 23-53).

Van Huben, in view of Maki does not expressly teach the amendments to the claims, but the Papiani article does suggest the amendments (ie., Papiani teaches a distributed scientific data archive using web, xml and SQL/MED for fast storage, searching and retrieval of large files using the web and object oriented technology such as Java Database Connectivity)(see Abstract, page 56; page 58, sec 2.1)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Van Huben to include creating a unique file comprising unique attributes for a specific class of entity and to include classification tree nodes with the new attributes for other business entities newly constructed as taught by Maki, providing the benefit of a method of defining unique, user determined attributes in a data management system for file and database management for a design control system (Van Huben, col 5, lines 5-15; col 6, lines 55-60), further to include a distributed database system for archiving using object oriented technology as taught by Papiani, providing the benefit of fast storage (see Papiani, Abstract section).

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Regarding claim 15, Van Huben teaches "storage ... system" (ie., storage structure for data)(col 12, lines 1-5);

Van Huben teaches "a processor for creating and defining a custom data field within a process management system in the storage element (ie., running on a computer in a client/server environment)(col 11, lines 20-25);

Van Huben teaches "software instructions stored in the storage element for enabling the computer system under control of the processor (ie., the Design Control System can implement programs written in cross platform languages like Java and VRML ... interacting with objects)(col 11, lines 20-30).

Van Huben does not expressly teach, but Maki teaches "create a file ... custom data field" (ie., create a unique file comprising the item classification)(col 3, lines 10-20)(unique attributes for a specific class of entity)(col 1, lines 8-10).

Van Huben teaches "define a model ... field" (ie., provide a data management model structure as part of library ...)(col 7, lines 20-40; col 13, lines 59).

Van Huben teaches "package ... file" (ie., archiving and backing up data in the library)(col 28, lines 40-63);

Van Huben teaches "adding the archive file into the process management system as a new class" (ie., archiving and backing up is done with the Design Control Repository onto tape or another repository. With the broadest reasonable interpretation of the claim language of 'archive', it is the examiner's position that the first item in the repository will be the new class)(col 28, lines 41-62).

Van Huben does not expressly teach, but Maki teaches "insert the custom data field" (ie., classification tree nodes with new attributes for other business entities constructed)(col 4, lines 23-53).

Van Huben, in view of Maki does not expressly teach the amendments to the claims, but the Papiani article does suggest the amendments (ie., Papiani teaches a distributed scientific data archive using web, xml and SQL/MED for fast storage, searching and retrieval of large files using the web and object oriented technology such as Java Database Connectivity)(see Abstract, page 56; page 58, sec 2.1)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Van Huben to include creating a unique file comprising unique attributes for a specific class of entity and to include classification tree nodes with the new attributes for other business entities newly constructed as taught by Maki, providing the benefit of a method of defining unique, user determined attributes in a data management system for file and database management for a design control system (Van Huben, col 5, lines 5-15; col 6, lines 55-60), further to include a distributed database system for archiving using object oriented technology as taught by Papiani, providing the benefit of fast storage (see Papiani, Abstract section).

Van Huben teaches "a processor ... element" (ie., unique user determined attributes for storing data)(col 5, lines 5-15).

Regarding claim 16, Van Huben teaches "computer monitor ... system" (ie., individual computer 30 in Fig 1)(display screen for displaying images ... to user)(col 13, lines 15-30).

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Regarding claim 17, Van Huben teaches "input device ... system" (ie., mouse interactions, fill-in fields must be keyed and/or mouse)(col 40, line 39).

4-2) Claims 4, 5, 6, 7, 10, 13, 14, 18, 19, 20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Van Huben</u> et al (as cited above), in view of <u>Maki</u> et al (US 5201047, issued Apr 6, 1993), further in view of <u>Applicant Admitted Prior Art</u> (hereinafter "AAPA"), further in view of <u>Papiani</u> (as cited above).

Regarding claim 4, Van Huben does teach the amended portions for object oriented class (ie., object oriented database)(see Abstract section).

Van Huben in view of Maki does not expressly teach, but AAPA teaches "deploying ... class" (ie., Deploy button)(fig 5, page 7, paragraph 20).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Van Huben in view of Maki to include deploying an application as taught by the AAPA, providing the benefit of implementing the attribute base classification (Maki, col 4, lines 54-57) in a data management system for file and database management for design control system (Van Huben, col 6, lines 55-60).

**Regarding claim 5**, Van Huben does teach the amended portions for object oriented class (ie., object oriented database)(see Abstract section).

Van Huben in view of Maki does not expressly teach, but AAPA teaches "testing ... new class" (ie., Testing results displayed along with an action shows there is testing)(Fig 8).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Van Huben in view of Maki to include testing results of an

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application as taught by the AAPA, providing the benefit of implementing the attribute base classification (Maki, col 4, lines 54-57) in a data management system for file and database management for design control system (Van Huben, col 6, lines 55-60).

Regarding claim 6, 13, Van Huben in view of Maki does not expressly teach, but AAPA teaches "model ... interfaces" (ie., interfaces are "claim process" and "office setup"; the Process map shows the model)(Fig 5 and 8).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Van Huben in view of Maki to include testing results of an application as taught by the AAPA, providing the benefit of implementing the attribute base classification (Maki, col 4, lines 54-57) in a data management system for file and database management for design control system (Van Huben, col 6, lines 55-60).

Regarding claim 7, 14, Van Huben teaches "class determines ... custom data field" (ie., data management of database with tables and attributes where attributes are unique and determined by the user)(col 6, lines 54-67; col 5, lines 5-15).

Regarding claims 10, 18, Van Huben teaches "defining a model ... field" (ie., provide a data management model structure as part of library ...)(col 7, lines 20-40; col 13, lines 59).

Van Huben teaches "packaging ... file" (ie., archiving and backing up data in the library)(col 28, lines 40-63).

Van Huben teaches wherein the process management system executes on the computer system (ie., running on a computer in a client/server environment)(col 11, lines 20-25).

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Van Huben teaches "adding the archive file into the process management system as a new class (ie., archiving and backing up is done with the Design Control Repository onto tape or another repository. With the broadest reasonable interpretation of the claim language of 'archive', it is the examiner's position that the first item in the repository will be the new class)(col 28, lines 41-62).

Van Huben does teach the amended portions for object oriented class (ie., object oriented database)(see Abstract section).

Van Huben does not expressly teach, but Maki teaches "creating a file ... custom data field" (ie., create a unique file comprising the item classification)(col 3, lines 10-20)(unique attributes for a specific class of entity)(col 1, lines 8-10).

Van Huben does not expressly teach, but Maki teaches inserting the custom data field (ie., classification tree nodes with new attributes for other business entities constructed)(col 4, lines 23-53).

Van Huben in view of Maki does not expressly teach, but AAPA teaches "deploying ... class" (ie., Deploy button)(fig 5, page 7, paragraph 20).

Van Huben in view of Maki does not expressly teach, but AAPA teaches "testing ... new class" (ie., Testing results displayed along with an action shows there is testing)(Fig 8).

Van Huben, in view of Maki and AAPA does not expressly teach the amendments to the claims, but the Papiani article does suggest the amendments (ie., Papiani teaches a distributed scientific data archive using web, xml and SQL/MED for fast storage, searching and retrieval of large files using the web and object oriented

technology such as Java Database Connectivity)(see Abstract, page 56; page 58, sec 2.1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Van Huben to include creating a unique file comprising unique attributes for a specific class of entity, classification tree nodes with new attributes for other business entities newly constructed as taught by Maki, providing the benefit of a method of defining unique, user determined attributes in a data management system for file and database management for a design control system (Van Huben, col 5, lines 5-15; col 6, lines 55-60), further to include deploying and testing a data management system as taught by AAPA, providing the benefit of implementing the attribute base classification (Maki, col 4, lines 54-57) in a data management system for file and database management for design control system (Van Huben, col 6, lines 55-60), further to include a distributed database system for archiving using object oriented technology as taught by Papiani, providing the benefit of fast storage (see Papiani, Abstract section).

Regarding claim 19, Van Huben teaches "model ... data field" (ie., snapshot of a library ... image of the library)(col 12, lines 25-30).

Regarding claim 20, Van Huben in view of Maki does not expressly teach, but AAPA teaches "model ... interfaces" (ie., interfaces are "claim process" and "office setup"; the Process map shows the model)(Fig 5 and 8).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Van Huben in view of Maki to include testing results of an

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application as taught by the AAPA, providing the benefit of implementing the attribute base classification (Maki, col 4, lines 54-57) in a data management system for file and database management for design control system (Van Huben, col 6, lines 55-60).

Regarding claim 21, Van Huben teaches "class determines ... custom data field" (ie., data management of database with tables and attributes where attributes are unique and determined by the user)(col 6, lines 54-67; col 5, lines 5-15).

## Response to Arguments

Applicant's arguments with respect to claims 1,4-8,10-21 have been considered but are most in view of the new ground(s) of rejection. The examiner introduces the Papiani NonPatent literature reference to suggest the amendments in conjunction with the claim limitations.

Additionally, Applicant's arguments filed 6/23/05 have been fully considered but they are not persuasive. Applicant argues that Maki does not show or suggest inserting a custom data field and adding the archive file in to the process management system as the object oriented class (page 10 middle). To address this, the Examiner asserts that the combination of reference (including Papiani) does suggest this limitation. Applicant argues that one skilled in the art would not have combined Van Huben and Maki. The Examiner disagrees and asserts that the Papiani article shows motivation to combine these references because archiving with object-relational database management system were well established in the art (also evidenced by the attached Dunlop Nonpatent literature). Applicant's remaining arguments deal with the claims as

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amended and are addressed with the new reference (Papiani) and evidenced further by the Dunlop reference.

The combination of Van Huben, Maki, AAPA and Papiani suggest the present invention by reading the claims in the broadest reasonable interpretation.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam Sain whose telephone number is 571-272-4096. The examiner can normally be reached on M-F 9-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

) Ulani G. Salure WILLIAM BASHORE PRIMARY EXAMINER

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